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***Nassau County Planning Commission***

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# **Nassau Hub Major Investment Study**

## **EXECUTIVE SUMMARY**

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**A MESSAGE FROM  
NASSAU COUNTY EXECUTIVE  
THOMAS R. SUOZZI**



March 2006

Nassau County is at a critical crossroads in its economic development history. We have very little open space, taxes are too high, our infrastructure is aging, traffic congestion worsens and our children and grandchildren cannot afford to live here. I welcome the challenge of solving these problems to benefit all our residents.

My planning vision for Nassau County is what I call *New Suburbia*. This is a future that preserves our suburban quality of life: great schools, parks, beaches, recreation facilities, cultural attractions and low crime rates. We will also address the challenges of expanding our tax base with smart growth development, getting tax relief for our over-taxed residents, reducing automobile traffic and building affordable housing for our young people so that they can live, work and raise their families in the County where they grew up.

Any solutions to these problems must center upon the commercial heart of our County, the Nassau HUB. This land area is where the greatest opportunities for New Suburbia initiatives exist.

As part of this planning process, the Nassau HUB Major Investment Study ("MIS") is being released today. The study can be found at [www.nassaucountyny.gov](http://www.nassaucountyny.gov). This report discusses several transportation options and development strategies for the Nassau HUB. The next step in the process is to conduct the environmental reviews required by the Federal Transit Administration. This phase will produce a Draft Environmental Impact Statement ("DEIS").

The MIS was an open and transparent process with the participation of professional consultants, thousands of residents, civic leaders, and regional planning and transportation agencies. Ten Steering and Stakeholder Committee meetings, four general public meetings and thirty-five economic development zone meetings were held throughout the County. The DEIS phase will invite similar participation.

I appreciate all the work that went into the MIS. The report is a very informative planning document. I am very excited that we are now on the road to making New Suburbia a reality.

Your questions and comments are always welcome.

A handwritten signature in blue ink, reading "Tom", followed by a vertical red line.

Thomas R. Suozzi  
County Executive



## Introduction

For more than 50 years, Nassau County has epitomized the suburban way of life. Starting with Levittown in 1947, one of the nation's first suburban communities, Nassau County has generally enjoyed unparalleled growth and prosperity. During this time, Nassau's success was primarily fueled by its residential and commercial development, much of which was done piecemeal, rather than as part of an overall vision, or plan. Accordingly, Nassau County is now essentially fully developed. Most of what's been added in the last 10 to 15 years is development that has contributed to the County's "suburban sprawl," although at this point even this approach has limited applications. Concurrently, the Nassau County's population base, which grew significantly through the 1950's and 1960's and peaked in 1970, has remained generally stable. The net result: Nassau County has stopped growing.

Today, major issues facing Nassau County include stagnant economic growth, an ever-increasing property tax burden and traffic congestion that continues to worsen. In addition, rising County expenses due to the increased costs required to cover unfunded State and Federal government mandated programs (i.e., Medicaid) collectively combine to pose serious challenges to preserving the suburban quality of life Nassau's residents have grown to expect. As the nation's first suburb, it has recently become clear that the paradigm used to guide the County during its first 50 years is no longer working. Accordingly, a new approach is now required to provide Nassau County with the economic resources needed to ensure its long term financial health; to do nothing only means that property taxes will continue to increase, traffic will get worse and essential government services will be reduced.

To help address these challenges, Nassau County Executive Tom Suozzi has proposed the concept of "New Suburbia," which is a vision to guide the County's growth for the next 50 years. The key to New Suburbia is to provide opportunities for economic growth in targeted areas, while preserving the historic suburban quality of life for the majority of the County. Under this vision, carefully planned development investments would be focused in the County's traditional downtowns, emerging minority communities, reclaimed Brownfield sites and the Nassau Hub. Collectively, the proposed new developments would help expand the County's tax base and provide new sources of revenue. As the most important commercial district within the County, developing the Hub into Nassau's downtown, or Nassau Centre, is the cornerstone of this vision.

Accordingly, the Nassau Hub Major Investment Study, or MIS, was commissioned, by Nassau County Planning Commission, to propose new transportation options and land use strategies that can help achieve this vision for New Suburbia. As such, any proposed new development must be done in conjunction with addressing the future transportation needs in this area, with the ultimate goals to improve access and mobility, promote economic development, and enhance the quality of life for the County's residents. Through the MIS process, a conceptual plan was developed with extensive public input.

## Project Overview

### *Study Area*

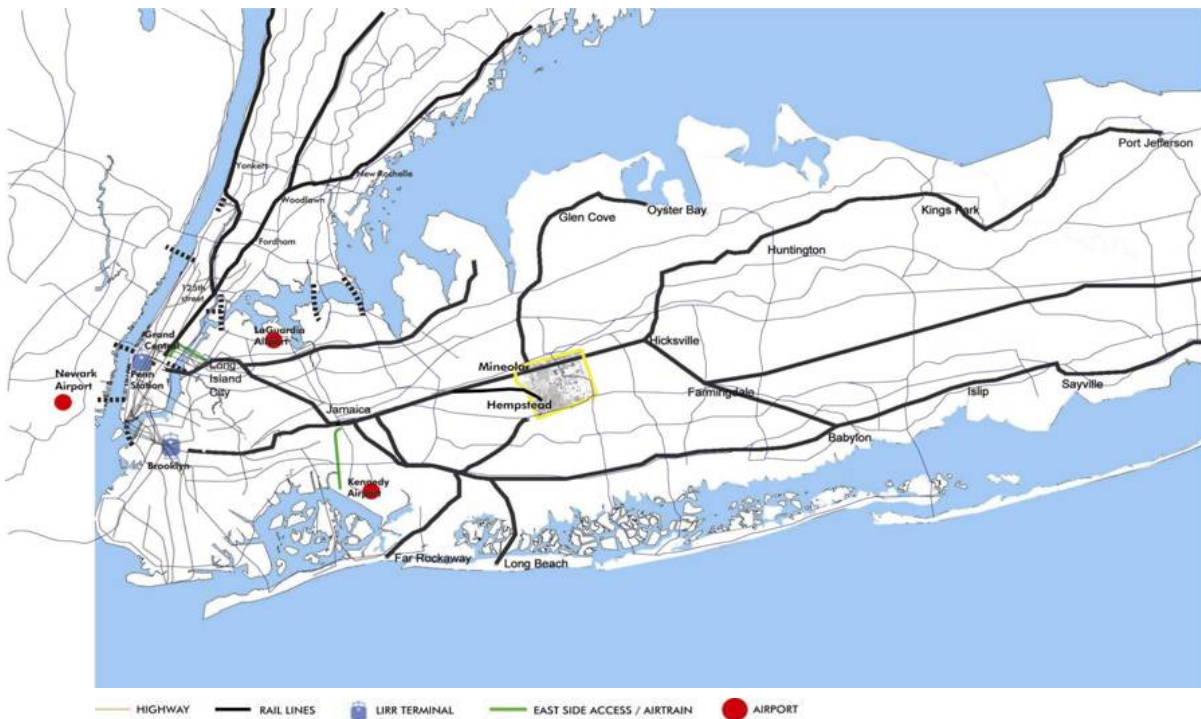
The study area, as illustrated in Figure ES-1, is located in central Nassau County. The northern boundary lies just to the north of the Long Island Rail Road's (LIRR) Port Jefferson Branch, while the southern boundary lies just to the south of the Hempstead Turnpike. The western boundary runs along Rockaway Avenue and Cathedral Avenue and the eastern boundary is Eisenhower Park. The study area covers approximately 10 square miles and encompasses all or parts of the Villages of Mineola, Westbury, Garden City and Hempstead; the Hamlets of Carle Place and Uniondale; and the unincorporated area (Census Designated Place) area of East Garden City.

**Figure ES-1: Study Area**



It is anticipated that the Hub MIS Study Area will receive the direct effects of any transit improvements discussed in this study and is therefore the main focus of this MIS. However, various alignment alternatives, discussed in the document, extend beyond the Study Area to include other parts of Nassau County. This is to provide a comprehensive regional approach to the transit improvements, which would link the transit options proposed in this Study Area with existing transit in the region, as illustrated in Figure ES-2. Thus, these alignment alternatives provide a regional network that would enhance the viability of mass transit, as a means of access to, and circulation within, the Nassau Hub.

**Figure ES-2: Regional Context**



### *Public Involvement*

The public involvement process was an important component in the overall Nassau Hub MIS. The public involvement process allowed the study team to identify important problems and needs in the study area as well as served to educate the public about the planning processes affecting the MIS and study issues to be addressed. Furthermore, a structured forum for citizens and other stakeholders to gather information, provide input, share their perspectives, help resolve conflicts and work toward consensus-building was created.



Over approximately, two years, there were ten meetings held with the study's Steering and Stakeholder Committees, with our additional meetings held with the general public. The Steering Committee was formed to provide an important means of dialogue with the study team and representatives of the regulatory agencies having jurisdiction within the study area. The Steering Committee generally provided direction to the Nassau County Planning Commission and helped guide the MIS. A Stakeholder Committee was comprised of approximately 150 individuals from a wide array of representative groups throughout the County who attended meetings to clarify study topics and issues, and aided in decision-making and consensus building regarding specific work tasks and the advancement of the MIS.

### *Study Goals*

Based upon feedback generated at the initial meetings with the Steering and Stakeholder Committees and the general public, the problems and needs identified for the study area include:

- High levels of roadway congestion
- Missing transportation linkages between the six LIRR stations within the study area and the major activity centers, such as Roosevelt Field and the Nassau Coliseum
- Incomplete transportation linkages between the various study area activity centers
- Disjointed land use patterns
- Automobile-oriented land use development, which has led to an over-reliance on automobiles for traveling to, from and within the Nassau Hub area
- Lack of North-South transit connectivity

To address the problems and needs described above, the MIS participants identified four primary study goals:

1. *Transportation Goal:* Provide safe, high-quality, multi-modal transportation service to/from the Nassau Hub Corridor
2. *Land Use Development Goal:* Develop transit supportive land use plans and policies for the Nassau Hub Corridor
3. *Design Goal:* Create a sense of place for the proposed transit station areas within the Hub area, consistent with surrounding neighborhoods and with preserving Nassau County's suburban quality of life
4. *Economic Development Goal:* Promote new development options capable of growing Nassau County's economic base



*Land Use and Future Development Scenarios*

Through the public forums, MIS participants eventually came to understand the strong link between new transit investments and the ability to target new economic growth in the study area, but particularly along the route and around stations. Therefore, the stakeholders identified specific goals to guide the design of future development scenarios. The goals included:

- Create mixed use developments that allow for more vibrant communities
- Create economic development opportunities by increasing density allowing for land to be redeveloped for higher uses
- Provide opportunities to create a variety of housing types while also providing neighborhood retail and service to reinforce community
- Enhance overall economic activity in the area by integrating more dense developments into existing neighborhoods
- Develop alternative mass transit links
- Create higher density associated with transit oriented development that discourages sprawl
- Reduce parking requirements as employees have the opportunity to walk to work or take mass transit. Take advantage of differing peak parking demands for different uses inherent in mixed use development
- Allow county's tax base to grow more rapidly while maximizing the use of existing infrastructure

The MIS also created an opportunity to articulate a plan that proactively develops a new series of transit-oriented land uses around each of the proposed transit stations within the entire Hub Study Area, rather than merely having new transit investment react to prior land uses that developed around the automobile. Accordingly, areas surrounding each proposed station within the Hub Area were evaluated and used as the basis for developing station specific development concepts. This was a detailed but critically important undertaking in that it eschewed the concept of a “cookie cutter” approach in favor of complementing the land uses around each station.

Also as part of the land use analysis, the development potential for vacant or underutilized parcels in the study area was assessed. It identified where redevelopment opportunities existed, determined viable future development patterns, and, most importantly, created new economic development opportunities. Additionally, recognizing the traditional relationship between improved transit access and increased land values, development scenarios included higher densities around transit stations to capitalize on the additional development demand. What resulted was that transit-oriented development (TOD) design principles were employed

to help achieve study objectives by creating a balance between transportation and proposed land uses and future development

By creating new transit links, and by encouraging developments to cluster around transit stations, new “destinations” points will eventually arise, while existing “destinations” will become reinvigorated, with the net result a new identity and vitality within the Hub Area.

#### *List of Alternatives – Methodology, Analysis, and Evaluation*

Concurrent with the land use studies and the creation of development alternatives was the task of identifying the most promising transportation options. To accomplish this, a methodology was developed to provide a rational framework for evaluating proposed potential solutions to address identified transportation problems. It is also important to note that for any MIS, the identification of transportation alternatives is one of the most crucial elements of the overall analysis. With the Hub MIS, the public identified more than two dozen options they wanted the County to consider to help meet current and future travel needs beyond what is currently offered by existing transportation services.

This Preliminary, or Long List of Alternatives went through a qualitative evaluation process that pared down the list into the Short List of Alternatives. Screening criteria for narrowing the Preliminary List into the Short List included:

- Consistency with study goals and objectives
- Institutional constraints
- Accessibility and convenience
- Operational feasibility
- Environmental impacts

The Short List of Alternatives included three different transit technologies:

- *Bus Rapid transit (BRT)*: BRT provides high capacity bus operation when operated along exclusive bus-only-roadway; it combines the quality of rail transit with the flexibility of buses.
- *Light Rail Transit (LRT)*: LRT is a technology that uses lightweight passenger rail cars that can operate as either single-car or multiple-car trains on fixed rails.
- *Automated Guideway Transit (AGT)*: AGT is an automated transit service, generally operated without an onboard crew; computers are used to control vehicular speed, spacing and stopping.

For each mode, there are two build out scenarios: the Core System and Full Network System. These scenarios are illustrated in Figure ES-2 and ES-3, on the following pages.

Figure ES-3: Conceptual Transit Option – Core System (Overview)

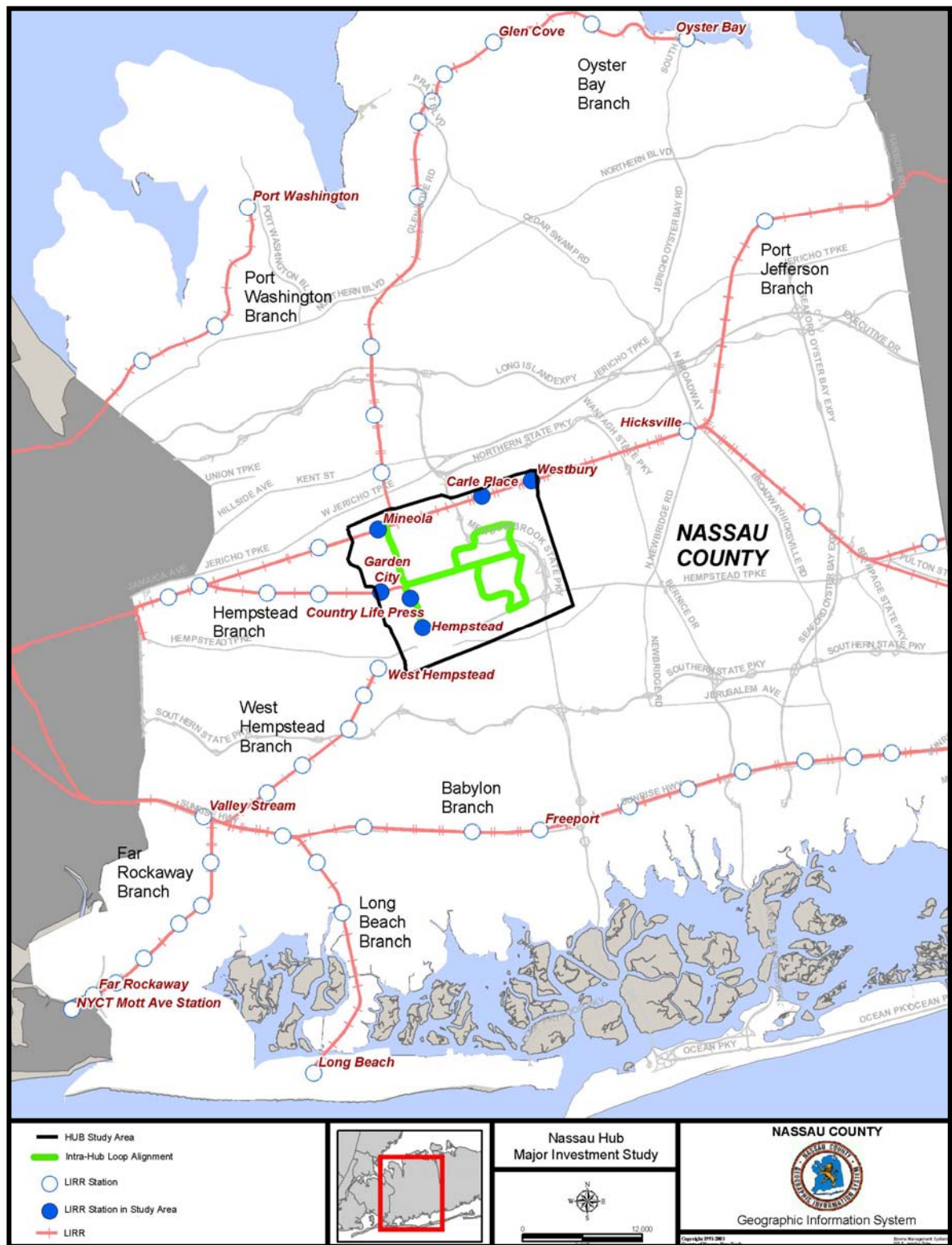
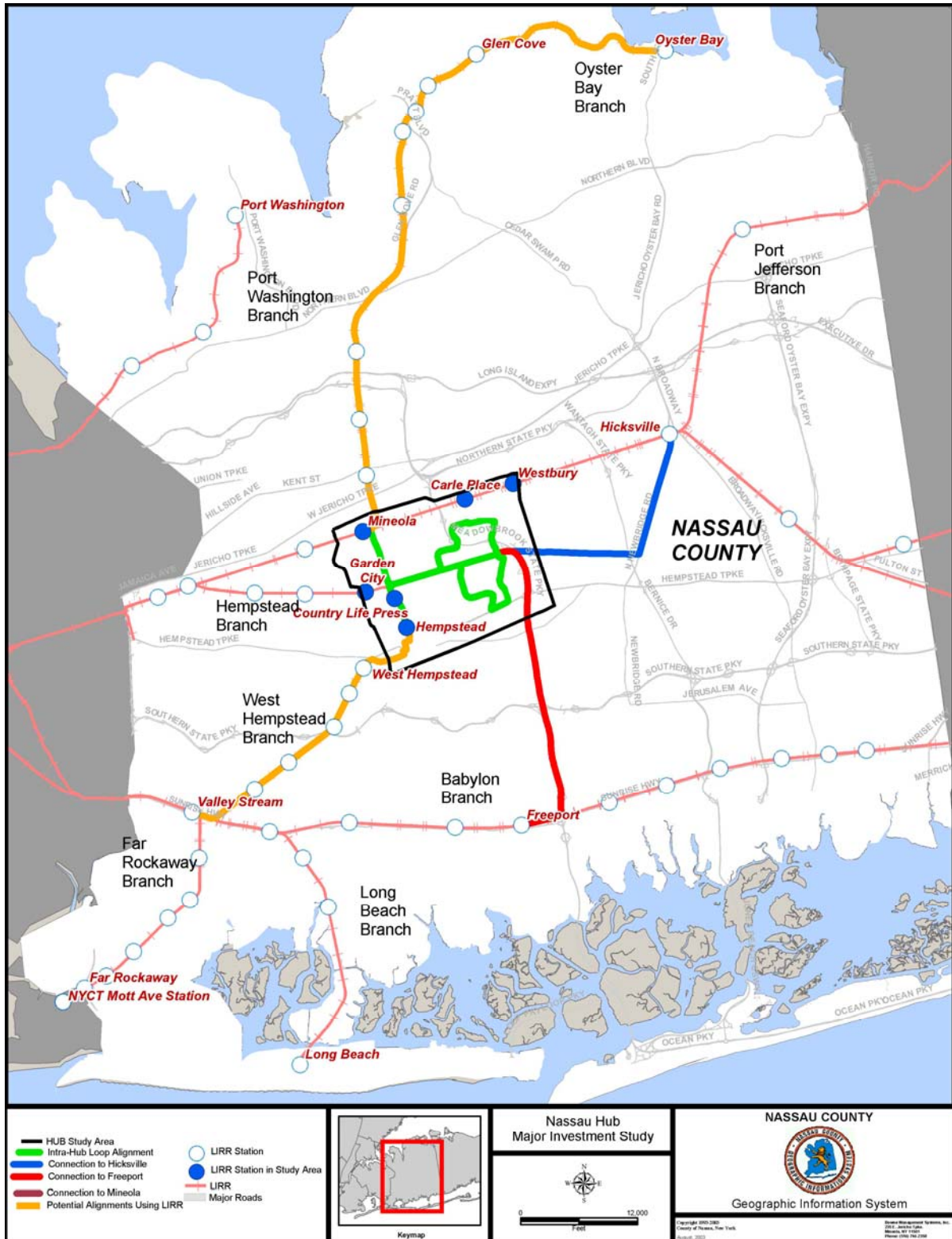


Figure ES-4: Conceptual Transit Alignment – Full System



The Core System is envisioned to enable customers to access the Hub Area by making new connections not generally available today, particularly from the LIRR. This will help attract reverse peak riders from areas west of Nassau County, while also attracting new peak direction (westbound) riders to the Hub Area. The Core System will help distribute new regional and county-wide transit customers to existing and proposed destinations within the Hub Area, as well as serve as a Hub circulator system.

Under the Full System, the benefits of the Core System are extended to reach other parts of Nassau County, including as far north as Oyster Bay, Hicksville to the East, Freeport to the southeast and Valley Stream to the southwest. Fully established, these four branches would radiate from the Hub Area in an “X” pattern, with the traditional downtowns of the Hub Area firmly centered in the nexus of the “X.” Whenever possible, new intermodal connections to the LIRR and to Long Island Bus would be created, so as to make connecting travel within the County as convenient as possible and to extend the benefits of the Full System investment. Furthermore, the Full System will provide additional regional transit connections to Suffolk County and New York City.

The Short List of Alternatives were subsequently refined to include a greater level of detail so that analytical results would better help decision makers and the public evaluate the relative merits of each option. During this evaluation phase, the following information and analyses were produced:

- Development of preliminary operating plans
- Development of preliminary travel demand forecasts
- Development of high-level, order of magnitude capital costs
- Development of high-level, order of magnitude operating & maintenance (O&M) costs
- Development of preliminary financial analysis

The operating plans for all of the modes assumed that the vehicles will run along a fixed guideway system, will be separated from traffic, and will receive traffic signal preemption.

Ridership forecasts were developed using a travel demand model system developed by the New York State Department of Transportation (NYSDOT) for its MIS – The Long Island Transportation Plan to Manage Congestion (LITP). Due to time and funding constraints, the LRT and AGT modes were combined since these modes have similar carrying capacities and operating characteristics. What was learned was that the LRT and AGT alternatives were projected to attract the highest levels of ridership compared with BRT under both the core system and full system scenarios. The full system scenarios for all modes attracted significantly higher numbers of riders compared with the core system alignment.

Each alternative has been proposed and developed in as cost effective manner as possible. Examples of the attention to cost are evidenced by the proposal to reuse existing railroad rights-of-way and not proposing elaborate stations or burying transit in expensive tunnels.

Under the core system scenario, LRT is slightly less expensive to build than BRT because fewer LRT vehicles are required as compared to BRT vehicles. This is because LRT vehicles have a higher carrying capacity than BRT vehicles. Thus, fewer LRT than BRT vehicles are required to carry the same number of passengers. In addition, for both the core and full scenario, on a cost per mile basis LRT is estimated to cost less to operate and maintain than BRT since they carry more riders and thus have higher productivity per vehicle. AGT cost, for both development scenarios are higher than BRT or LRT because it requires far more technically complex technology to build and its extremely high maintenance needs offsets its potential advantage for unstaffed trains.

There are significant financial challenges to be addressed before the Nassau Hub project can be implemented. Traditional sources of funding are not likely to be available due to on-going budgetary pressures at all levels of government. In addition, available funding sources already in place in the New York City region are generally limited and consumed by projects that are either already being implemented, or are well advanced in the planning process. The most promising potential source of funding may be through some form of joint development or public-private partnership that can leverage the government-based funds (i.e., Federal, State and local) that may become available for this project.

## Next Steps

Based upon the results of extensive public input, the Short List Alternatives will be advanced for consideration and review as part of the next phase of the Hub planning initiative. In response to issues raised during the public outreach process regarding the Core System and Full System alignments, the County may also look to reevaluate one, or both options during the next phase of the project. More specifically, the next study phase will be the preparation of a Draft Environmental Impact Statement (DEIS). At the onset of the DEIS, Public Scoping will take place and the public will have a chance to review and discuss all three modes (i.e., AGT, BRT, and LRT) and the two alignments (i.e., Core System and Full Network).